

# **MATERIAL SAFETY DATA SHEET**

## **MSDS # 1170 – COLD GOLD FLASHING ADHESIVE**

**IMPORTANT:** Read this Material Safety Data Sheet before handling or disposing of this product. This product safety information is provided to help our customers with health, safety and/or environmental matters. We have taken reasonable effort to ensure that the test methods and sources for this data are correct and reliable, however, we give no warranty, expressed or implied, regarding its correctness. Since conditions or methods of handling and using this product are beyond our control, we do not assume responsibility and expressly disclaim liability for damages resulting from or connected with the handling, storage, use or disposal of the product.

### **SECTION 1 PRODUCT AND MANUFACTURER'S INFORMATION**

*Manufacturer/Supplier's Name:* IKO Industries Ltd.

*Address:* 71 Orenda Road  
Brampton, Ontario  
L6W 1V8

*Emergency Phone:* (905) 457-2880 - EXT. 3354

*Product Name:* Cold Gold Flashing Adhesive

### **SECTION 2 PREPARATION INFORMATION**

*Prepared/Reviewed By:* HSE Department

*Phone Number:* (905) 457-2880 - EXT. 3354

*Date:* December 15, 2014

### **SECTION 3 HAZARDS IDENTIFICATION**

#### **Emergency Overview**

This product is a black viscous mastic, with a faint petroleum odor. Upon heating, toxic hydrogen sulfide gas may be released. Irritating to eyes, skin and respiratory tract. May cause allergic respiratory and/or skin reactions. Ingestion and/or inhalation of this product causes central nervous system (CNS) effects.

#### **Potential Health Effects: Eyes**

Irritating to the eyes including a burning sensation, redness, swelling and blurred vision.

#### **Potential Health Effects: Skin**

Irritating to the skin. May be absorbed through the skin. May cause allergic skin reactions. Repeating exposure may cause skin dryness or cracking.

#### **Potential Health Effects: Ingestion**

Ingestion may result in central nervous system (CNS) effects including headache, sleepiness, dizziness, slurred speech and blurred vision.

#### **Potential Health Effects: Inhalation**

May cause irritation to the nose and upper respiratory tract. Inhalation causes central nervous system (CNS) depression with symptoms such as weakness, dizziness, confusion and drowsiness. May cause allergic respiratory response.

HMIS Ratings: Health: 2\* Fire: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### **SECTION 4 COMPOSITION / INFORMATION ON INGREDIENTS**

<b>CAS #</b>	<b>Component</b>	<b>Percent</b>
8052-42-4	Asphalt	30-60
6846-50-0	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	15-40
1333-86-4	Carbon black	5-10
4083-64-1	Benzenesulfonyl isocyanate, 4-methyl-	0.1-1

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### Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication) and is a controlled product according to the Canadian Controlled Product Regulations.

### SECTION 5 FIRST AID MEASURES

#### First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

#### First Aid: Skin

For skin contact flush with large amounts of water while removing contaminated clothing. Wash contaminated clothing before reuse. If irritation persists or a rash occurs, get medical attention.

#### First Aid: Ingestion

If material is ingested, immediately contact a physician or poison control center. Do not induce vomiting.

#### First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. Call a physician if symptoms develop or persist. If not breathing, give artificial respiration and call a physician immediately.

### SECTION 6 FIRE FIGHTING MEASURES

#### General Fire Hazards

See Section 10 for Flammability Properties.

Combustible liquid when heated. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Vapor/air mixtures may be explosive.

#### Hazardous Combustion Products

Hydrocyanic acid, oxides of carbon, oxides of nitrogen, oxides of sulfur, H<sub>2</sub>S, low molecular weight hydrocarbons and other toxic fumes.

#### Extinguishing Media

Dry chemical, alcohol-resistant foam, carbon dioxide, water fog.

#### Unsuitable Extinguishing Media

Do not use direct water stream.

#### Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus. Clear area of unprotected personnel. Move container from area if it can be done without risk. Cool containers with water spray until well after fire is out to prevent vapor build up, which could result in container rupture.

NFPA Ratings: Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### SECTION 7 ACCIDENTIAL RELEASE MEASURES

#### Containment Procedures

Contain the discharged material, if this is without risk. Reduce vapors with water spray. Eliminate ignition sources or flammables that may come into contact with a spill of this material.

#### Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Ventilate the contaminated area. Absorb with inert material. Shovel material into appropriate container for disposal.

#### Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

#### Special Procedures

Follow all Local, State, Federal and Provincial regulations for disposal.

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### SECTION 8 HANDLING AND STORAGE

#### Handling Procedures

Do not get material into eyes or on skin. Do not breathe vapors or mists of this product. Keep away from heat, sparks or open flame.

#### Storage Procedures

Keep the container tightly closed and in a cool, well-ventilated place. Eliminate all sources of ignition.

### SECTION 9 EXPOSURE CONTROLS / PERSONNEL PROTECTION

#### A: Component Exposure Limits

##### Asphalt (8052-42-4)

ACGIH: 0.5 mg/m<sup>3</sup> TWA (as benzene soluble aerosol, fume, inhalable fraction)

NIOSH: 5 mg/m<sup>3</sup> Ceiling (fume, 15 min)

##### Carbon black (1333-86-4)

ACGIH: 3.5 mg/m<sup>3</sup> TWA

OSHA: 3.5 mg/m<sup>3</sup> TWA

NIOSH: 3.5 mg/m<sup>3</sup> TWA; 0.1 mg/m<sup>3</sup> TWA (carbon black in presence of polycyclic aromatic hydrocarbons, as PAH)

#### Engineering Controls

Use local exhaust ventilation to maintain worker exposure to below Occupational Exposure Limits.

#### PERSONAL PROTECTIVE EQUIPMENT

##### Personal Protective Equipment: Eyes/Face

Wear chemical goggles if splashing is possible.

##### Personal Protective Equipment: Skin

Avoid contact with skin.

##### Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively prevent buildup of vapors, appropriate NIOSH respiratory protection must be provided.

##### Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

### SECTION 10 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black viscous	Odor:	Faint petroleum
Physical State:	Mastic	pH:	Not Applicable
Vapor Pressure:	Not Available	Vapor Density:	Not Available
Boiling Point:	Not Available	Melting Point:	Not Available
Solubility (H <sub>2</sub> O):	Not Available	Specific Gravity:	1.01
Evaporation Rate:	Not Available	VOC:	Not Available
Viscosity:	1 – 2 million cps	Bulk Density:	Not Available
Octanol/H <sub>2</sub> O Coeff.:	Not Available	Flash Point:	149°C (300°F)
Flash Point Method:	Pensky-Martins	Upper Flammability	Not Available
	Closed Cup	Limit (UFL):	
Lower Flammability	Not Available	Burning Rate:	Not Available
Limit (LFL):			
Auto Ignition:	Not Available		

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### SECTION 11 CHEMICAL STABILITY AND REACTIVITY INFORMATION

#### Chemical Stability

Stable under recommended conditions of storage and handling.

#### Chemical Stability: Conditions to Avoid

Keep away from heat, ignition sources and incompatible materials.

#### Incompatibility

Avoid contact with water, acids, bases, alcohols, strong oxidizers and metal compounds.

#### Hazardous Decomposition

Hydrocyanic acid, oxides of carbon, oxides of nitrogen, oxides of sulfur, H<sub>2</sub>S, low molecular weight hydrocarbons and other toxic fumes.

#### Possibility of Hazardous Reactions

Will not occur.

### SECTION 12 TOXICOLOGICAL INFORMATION

#### Acute Dose Effects

##### A: General Product Information

Excessive inhalation or ingestion of this material may cause central nervous system depression.

Symptoms include headache, dizziness, nausea and loss of coordination. Causes eye irritation.

Causes irritation of the skin, gastrointestinal tract or respiratory system. May be absorbed through the skin. May cause allergic respiratory and skin reactions.

##### B: Component Analysis - LD<sub>50</sub>/LC<sub>50</sub>

Asphalt (8052-42-4)

Oral LD<sub>50</sub> Rat >5000 mg/kg; Dermal LD<sub>50</sub> Rabbit >2000 mg/kg

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0)

Oral LD<sub>50</sub> Rat >3200 mg/kg

Carbon black (1333-86-4)

Oral LD<sub>50</sub> Rat >15400 mg/kg; Dermal LD<sub>50</sub> Rabbit >3 g/kg

Benzenesulfonyl isocyanate, 4-methyl- (4083-64-1)

Inhalation LC<sub>50</sub> Rat >640 ppm 1 h; Oral LD<sub>50</sub> Rat 2234 mg/kg

#### Repeated Dose Effects

Repeated exposure may cause respiratory, heart, liver and kidney damage.

#### Carcinogenicity

##### A: General Product Information

Based on a 2000 review of health effects literature, NIOSH concluded that roofing asphalt fumes are a potential occupational carcinogen.

##### B: Component Carcinogenicity

Asphalt (8052-42-4)

ACGIH:

A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)

NIOSH:

potential occupational carcinogen (roofing asphalt fumes & asphalt-based paints)

IARC:

Supplement 7 [1987]; Monograph 35 [1985] (extracts of steam-refined and air-refined) (Group 2B (possibly carcinogenic to humans))

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Carbon black (1333-86-4)

ACGIH:

NIOSH:

IARC:

A4 - Not Classifiable as a Human Carcinogen

potential occupational carcinogen

Monograph 93 [in preparation]; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))

**WARNING:** This product may contain oxidized bitumens. The International Agency for Research on Cancer (the "IARC") published a monograph in 2013 which concluded that "occupational exposure to oxidized bitumens and their emissions during roofing operations are probably carcinogenic to humans." The IARC found that there is "limited evidence" in humans for the carcinogenicity of occupational exposures to bitumens and bitumen emissions during roofing and mastic-asphalt work. The IARC also found that there is "sufficient evidence" in experimental animals for carcinogenicity of fume condensates generated from oxidized bitumen. All other evidence of cancer in humans and experimental animals was judged "inadequate" or "limited." The physical nature of this product may help limit any inhalation hazard from oxidized asphalt during application in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.

### SECTION 13 ECOLOGICAL INFORMATION

#### Ecotoxicity

##### A: General Product Information

No information available for the product.

##### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0)

Test & Species	Results	Conditions
96 Hr LC50 Pimephales promelas	>1.55 mg/L	static
48 Hr EC50 Daphnia magna	>1.46 mg/L	

Carbon black (133-86-4)

Test & Species	Results	Conditions
24 Hr EC50 Daphnia magna	>5600 mg/L	

#### Environmental Fate

No information available for the product.

#### Persistence & Degradability

No information available for the product.

#### Bioaccumulation & Accumulation

No information available for the product.

#### Mobility in Environmental Media

No information available for the product.

#### Other Adverse Effects

No additional information available.

### SECTION 14 DISPOSAL CONSIDERATIONS

#### US EPA Waste Number & Descriptions

##### A: General Product Information

Discarded product and/or wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

##### B: Component Waste Numbers

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No EPA Waste Numbers are applicable for this product's components.

### Disposal Instructions

Dispose of waste material according to all Local, State, Federal, and Provincial Environmental Regulations. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

See Section 8 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

### SECTION 15 TRANSPORTATION INFORMATION

#### US DOT Information

Shipping Name: Not regulated as a hazardous material for transport.

#### TDG Information

Shipping Name: Not regulated as a dangerous good.

### SECTION 16 REGULATORY INFORMATION

#### US Federal Regulations

##### A: General Product Information

No information available for the product.

##### B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

Acute Health: Yes Chronic Health: Yes Fire: No Pressure: No Reactive: No

#### State Regulations

##### A: General Product Information

Other state regulations may apply. Check individual state requirements.

##### B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes	Yes
Carbon black	1333-86-4	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

#### Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Carbon black	1333-86-4	1%

#### WHMIS Classification:

D2A- Respiratory sensitization.

D2B- Eye/skin irritation. Skin sensitization.

#### Additional Regulatory Information

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## **MSDS # 1170 – COLD GOLD FLASHING ADHESIVE**

### A: General Product Information

No additional information available.

### B: Component Analysis – Inventory

Component	CAS#	TSCA	CAN	EEC
Asphalt	8052-42-4	Yes	DSL	EINECS
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	Yes	DSL	EINECS
Carbon black	1333-86-4	Yes	DSL	EINECS
Benzenesulfonyl isocyanate, 4-methyl-	4083-64-1	Yes	DSL	EINECS

### SECTION 17 OTHER INFORMATION

#### Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; CFR = Code of Federal Regulations; CNS = Central Nervous System; DSL = Domestic Substances List; EINECS = European Inventory of Existing Commercial Chemical Substances; EPA = Environmental Protection Agency; HEPA = High Efficiency Particulate Air filters; IARC = International Agency for Research on Cancer; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; RCRA = Resource Conservation and Recovery Act; SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit; TDG = Transport Dangerous Goods TSCA = Toxic Substance Control Act; TWA = Time Weighted Average; WHMIS = Workplace Hazardous Materials Information System.